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Datasheet for KOA0222

# Rat IL-4 ELISA Kit

## Overview

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| **Description:** | Rat IL-4 AccuSignal ELISA Kit - KOA0222 |
| **Item No.:** | KOA0222 |
| **Size:** | 1 Kit |
| **Applications:** | ELISA |
| **Reactivity:** | Rat |
| **Range:** | 15.6 pg/ml - 1000 pg/ml |

## Product Details

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| **Background:** | Interleukin-4(IL-4), also knowns as a B-cell stimulatory factor1(BSF1), is an immunomodulatory cytokine, which can inhibit the growth of tumour cells. The human cDNA contains a single open reading frame encoding a protein of 153 amino acids, including a putative signal peptide. IL-4 may act as an autocrine growth factor in pancreatic cancer cells and also give rise to the possibility that cancer-derived IL-4 may suppress cancer-directed immunosurveillance in vivo in addition to its growth-promoting effects, thereby facilitating pancreatic tumor growth and metastasis. The mouse and human genes and their protein products show structural and functional similarities. The human IL-4 gene, which occurs as a single copy in the haploid genome, is mapped on chromosome 5. Rat IL-4 is a 13.5KDa glycoprotein, consisting of 147 amino acids in precursor form and 123 amino acids in mature form. |
| **Synonyms:** | B cell growth factor 1, B cell stimulatory factor 1, BCGF 1, BCGF1, Binetrakin, BSF 1, BSF1, IL 4, Interleukin 4, Lymphocyte stimulatory factor 1, MGC79402, Pitrakinra |
| **Detection Kit Type:** | ELISA Kit |
| **Detection Range:** | 15.6 pg/ml - 1000 pg/ml |
| **Sensitivity:** | <1 pg/ml |

## Target Details

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| **Gene Name:** | IL4 |
| **Reactivity:** | Rat |
| **Immunogen:** | Expression system for standard: E.coli; Immunogen sequence:  C25-S147 |

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| **Purity/Specificity:** | Natural and recombinant rat IL-4. There is no detectable cross-reactivity with other relevant proteins. |
| **Relevant Links:** | • UniProtKB - P20096<br>• NCBI - NP_958427.1<br>• GeneID - 287287<br>• KOA0222 Protocol |

## Application Details

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| **Tested Applications:** | ELISA |
| **Application Note:** | Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml, 15.6pg/ml rat IL-4 standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates or serum to each empty well. We recommend that each rat IL-4 standard solution and each sample is measured in duplicate. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |

## Formulation

## Shipping & Handling

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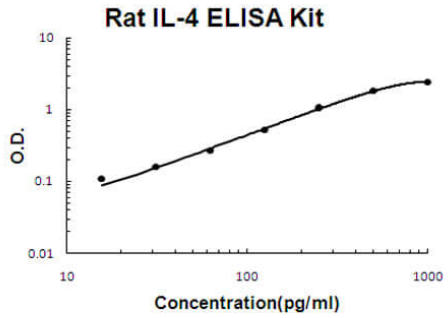
| **Shipping Condition:** | Wet Ice |
| **Storage Condition:** | Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing. |
| **Expiration:** | See kit insert for complete instructions. |

## Images




**ELISA**
Rat IL-4 AccuSignal ELISA Kit standard curve. Assay Range: 15.6pg/ml-1000pg/ml. Sensitivity: <1pg/ml.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.